Executive Summary

The valuation of EQ-5D-5L health states in Korea

Min-Woo Jo¹, Jeonghoon Ahn², Seon-Ha Kim³, Sangjin Shin², Jooyeon Park², Min-Su Ok¹, Woo-Seung Son¹, Sun-Ok Kim¹

- ¹ Preventive Medicine, University of Ulsan College of Medicine, Seoul, South Korea
- ² National Evidence-based Healthcare Collaborating Agency, Seoul, South Korea
- ³ Department of Nursing, Dankook University, Choenan, South Korea

☐ Background

: The EuroQol Group recently published a new questionnaire, the EQ-5D-5L, which has 5 levels per each dimension. This study aims to estimate Korean preference weights for the EQ-5D-5L based on values elicited from representative sample and this is the first study applied the EuroQoL standard protocol of valuation.

: Total of 1,080 respondents were recruited from the general population of Korea using multi-stage quota sampling method. Each respondent valued 10 health states using the composite time trade-off in computer-assisted face-to-face interview, in the EQ-VT software from the EuroQoL group. Various prediction models were explored including the ones naturally extended from the 3-level valuation studies. The best model was selected by goodness of fit measures, logical consistency and parsimony.

Results

: The best model included dummy variables of each level of severity associated with each dimension, an intercept associated with any move away from full health, and a dummy term (N4) that picked up whether any dimension in the state had the 4th or 5th severe level. This model predicted the utilities for observed health states better than the other models. The

selected model has all the coefficients being statistically significant and logically consistent and it was parsimonious. The final model had a mean absolute error of 0.027 and none of 86 health states exceeded 0.1 for absolute error.

☐ Conclusions

: The final model in this paper appeared to predict the utilities of the states, which was valuated directly. This could be used interpolate quality weights of all EQ-5D-5L health states.

Key Words: EQ-5D-5L, quality of life, social values, composite time trade-off, utility